

## PATENT ABSTRACTS OF JAPAN

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(71)Applicant : NIPPON SOKEN INC  
DENSO CORP

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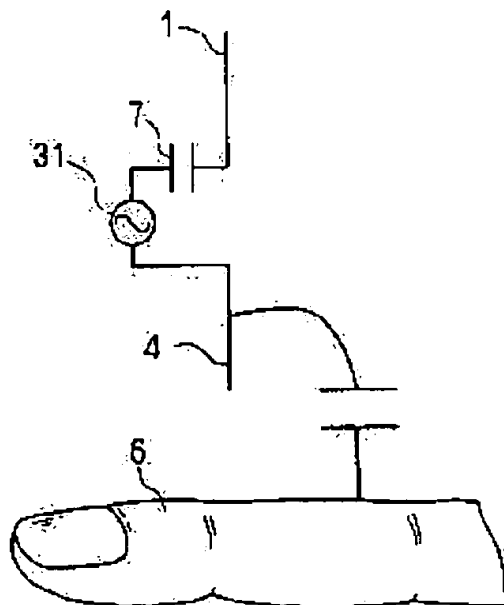
### (54) ANTENNA FOR PORTABLE RADIO EQUIPMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To improve the performance of an antenna for portable radio equipment.

SOLUTION: In the antenna for portable radio equipment to be used, while being mounted or held on a human body, an antenna element is configured by locating a shielding plate 4 inside a casing, which is tightly adhered on the human body, and electrostatically coupled in with the human body.

Furthermore, the cover of a battery 1 provided inside the casing is used as an antenna element, and an electric field type dipole antenna is formed from these elements. Since the shielding plate 4 is electrostatically coupled via the casing to the human body, human body can be utilized as a part of antenna elements and antenna efficiency can be improved.



LEGAL STATUS

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2/5/1 (Item 1 from file: 347)  
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07764610 \*\*Image available\*\*  
OBJECT SENSING APPARATUS FOR VEHICLE

PUB. NO.: 2003-258519 [JP 2003258519 A]  
PUBLISHED: September 12, 2003 (20030912)  
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FILED: February 28, 2002 (20020228)  
INTL CLASS: H01Q-001/22; G01S-013/56; H01Q-001/32; H01Q-013/08;  
B60R-025/10

ABSTRACT

PROBLEM TO BE SOLVED: To provide an object sensing apparatus for a vehicle capable of excellently sensing an object.  
SOLUTION: A circularly polarized wave patch antenna 10 is installed on a ceiling of a vehicle, and since the circularly polarized wave patch antenna 10 emits a radio wave in a way of turning a polarized plane of a composite wave of two polarized waves in a lapse of time, a dead band area by the composite wave is moved as rotation of the polarized plane of the composite wave. If an area is a dead band at a time, the area is changed into an object sensing area as time elapses. Thus, the sensing apparatus can excellently sense an object in comparison with production of linearly polarized waves.

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07290046 \*\*Image available\*\*  
ANTENNA FOR PORTABLE RADIO EQUIPMENT

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APPLICANT(s): NIPPON SOKEN INC  
DENSO CORP  
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H04B-001/034; H04B-001/38

ABSTRACT

PROBLEM TO BE SOLVED: To improve the performance of an antenna for

01599230

Receiver, transmitter, communication system, and method of communication  
Empfänger, Sender, Kommunikationssystem, und Kommunikationsverfahren  
Recepteur, émetteur, système de communication et procédé de communication  
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APPLICATION (CC, No, Date): EP 2002029102 021230;

PRIORITY (CC, No, Date): JP 2001401418 011228

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;  
IE; IT; LI; LU; MC; NL; PT; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO

INTERNATIONAL PATENT CLASS: H04B-007/08

ABSTRACT EP 1324513 A2

A receiver, comprising a plurality of antennas configured to receive signals that are obtained by multiplying a plurality of data symbols transmitted over a plurality of data channels using spreading codes for each of the data channels, the data symbol being transmitted over a plurality of sub-carriers having different frequencies; a spreading code multiplier configured to multiply reception signals received by the plurality of antennas using spreading codes for the data channels corresponding to the reception signals; a weight controller configured to adjust **antenna** weights by which a reception signal received by each **antenna** is to be multiplied, and sub-carrier weights by which a reception signal received over each sub-carrier is to be multiplied; a weight multiplier configured to multiply the reception signals by the **antenna** weights and the sub-carrier weights adjusted by the weight controller; and a combining unit configured to combine the reception signals multiplied by the **antenna** weights and the sub-carrier weights at the weight multiplier among the antennas and over spreading code duration of the spreading codes.

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NOTE:

Figure number on first page: 8

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SPEC A	(English)	200327	36122
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Total word count - document B			0
Total word count - documents A + B			38975